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Section 1: Description of the District

A. History

Give a short (one page) historical overview of the district. This is the place to express any significant historical events affecting the current state of the district and a place to generalize any

trends that appear likely to influence the future. For agricultural districts, describe changes in

irrigated acreages, cropping patterns, and evolving irrigation methods.

Enter the following information in the Plan Format (Section 1, page 1)

1. Date district formed and original size.

Enter the date that the district was legally organized. Enter the date of the first contract with

Reclamation. Enter the original size of the district in acres (there are 640 acres in a square mile).

Enter the date of the data entered in this Plan (within the last 2 years).

2. Size, population, and irrigated acres.

For the current year, enter the current district size (acres), urban population that is served (treated

drinking water), and irrigated acres served.

3. Water supplies received.

Enter the amount of water (in AF) received by the contractor during the year. Enter the actual

amount of water received from each of the listed sources.

Federal Urban Water - Water that is provided for urban, landscape irrigation, CII use.

Federal Agricultural Water - Water that is provided for agricultural irrigation use.

State Water - Water from the SWP.

Local/Other - Water transferred into the district is an example.

Local Surface Water - Santa Barbara's Gibraltar Reservoir is an example.

Upslope Drain Water - Water that flows from one farm to another (applies only to agricultural

contractors).

District Ground Water - The supply of water that the contractor pumps and supplies to customers

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through its distribution system.

Transferred Water - The amount of water the contractor bought, sold, or traded.

Reclaimed Water - The amount of urban treated waste water provided to contractor customers.

Other Water - Incidental agricultural, environmental, and all other non-agricultural,

Federal
water.

4. Annual entitlement under each right and/or contract.

Provide information on the contractor's entitlement or contractual amount from each source (Reclamation, SWP, ground water from adjudicated basins, drain water contracts, long-term transfer agreements, etc.). Please include each contractor's identifying number and any contract restrictions that affect the contractor's water management. Examples of restrictions include time of delivery or amount of water available per month. If these restrictions make some BMPs not applicable, beneficial, feasible, or legal for the contractor, please explain.

5. Describe anticipated land-use changes.

Changes (i.e., agricultural to urban, etc.) that are projected based on past change or anticipated due to possible, proposed, or are currently "in the works" zoning changes should be addressed. Such changes might include: Land annexation, increasing urbanization, or the area's General Plan.

6. Cropping patterns.

Identify any crops that are grown on 5 percent or more of the contractor's irrigated acreage and provide the total number of acres for each of those crops. If there are a large number of crops grown on small acreage, combine them into one group, and list the combined acreage on the MISC. (<5 percent) line in the table. Specifying this information for the specified years provides a reader with a perspective on how the contractor's mix of crops is changing. Use crop list provided in Attachment C of the Plan Format.

7. Major irrigation methods.

List the five major irrigation methods used on most acreage within the district for each of the specified years. Select from attached list (Attachment C). Combine the acreage of the other irrigation methods into one group and list the combined acreage on the "All Other" line in the table. Specifying this information for the specified years provides the reader with a perspective on how the contractor's mix of irrigation methods is changing. Identify the irrigation methods as

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listed in Attachment C of the Plan Format.

B. Location and Facilities

1. 2001 Agricultural Conveyance System

Describe the location (commonly used name also labeled on the district map), type of measurement device (flume, weir, propeller, acoustic, venturi, magnetic), and accuracy for each

incoming flow to the district delivery system. Enter the length (i.e., 1.2 miles) of unlined and

lined canals and laterals, of pipe, and of other types of distribution facilities (such as natural

channels). There are 5,280 feet in a mile.

2. 2001 Urban Distribution System

Enter the length (i.e., 1.2 miles) of steel, cast iron, and asbestos concrete pipe in the distribution

system. Combine the total length of other types of pipes (i.e., plastic) in the “Other” category.

3. List storage facilities.

Provide a list of contractor storage facilities that include capacity and location. A detailed descriptive map that contains this information will generally be the clearest way to describe the

water system. The map should delineate whether the distribution lines are pipelines, lined or

unlined canals or other, and the location of measuring devices, pumping stations, regulating

reservoirs, etc.

4. Describe agricultural spill recovery system.

Agricultural water providers should describe the contractor’s spill recovery system-how and

where distribution system spill water is collected and where it is re-used.

5. Describe delivery system operation.

Describe how customers schedule water deliveries with the district. Identify whether the delivery system provides water.

a. On demand (i.e., customer may draw water at any time without notice).

b. On request from the customer (i.e., customer requests start time, flow rate and quantity).

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c. On a rotation basis (i.e., each customer gets water every 10 days).

d. Or some combination of methods.

6. Describe restrictions on the contractor's water source(s).

If the contractor’s water supplies are constrained in some manner that limits contractor water

management and operations, explain. A constraint might be a contractual limitation, a physical limitation, or some other limitation. Constraints might limit the amount of water or time of use.

Agricultural water suppliers should include information about what operational constraints the system imposes on water management. Examples of operational constraints include receiving uncontrolled surface drainage from an upslope district with no control over quantity or timing and the inability to supply the quantity of water needed by the growers due to insufficient canal capacity, etc. If the contractor does not have sufficient supply to meet customer demand, discuss how this shortage developed.

7. Describe proposed changes or additions to contractor's facilities and operations for the next

5 years.

Examples of changes include changes to service area, lining/piping of existing canals, etc.

C. Topography and Soils

1. Describe topography of the district.

Describe the topography (e.g., hilly, flat, sloping to a watercourse) of the district. Discuss any

impact of topography on contractor's water management. An example of a topography impact

would be if lower sections of a gravity piped water distribution system have excessive pressure

while upper portions of the system have inadequate pressure for pressurized irrigation systems.

Topography also affects drainage capture and reuse.

2. Describe district's soils associations.

Provide district's soil associations (contact U. S. Department of Agriculture's Natural Resource

Conservation Service (NRCS) for information) at <http://www.nrcs.usda.gov/>. An NRCS general

soils map of the contractor service area will generally be the clearest way to present soils information.

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3. Describe limitations resulting from soil problems.

Describe any limitations resulting from soil problems (e.g., salinity or high water table, high and

low infiltration rates, etc.) within the district. If the contractor provides water to an area

that has a high water table or other water or drainage related problems, identify the problem, number of acres with that problem, and what impact(s) the problem has on water use. Contractor staff and customers will have knowledge of soil limitations and the resulting impacts on water management. For instance, crops grown on poor soils may require more water than crops grown on good soils. Some poor-soil management problems may be overcome with better management or more water. If the contractor can identify terrain and soils that use more than average amounts of water, these areas can be targeted for improved management programs.

D. Climate

1. Describe the general climate of the district.

Describe the general climate of the district (available from the National Weather Service, etc.).

Local newspapers or weather service companies generally can also provide a concise description

of local weather patterns. For weather data, specify the period of record (30 years recommended) and reference used. Historic weather data from the National Weather Service

climatological stations provide all the requested data. Identify which station you selected for the

contractor service area and how many years of records were available. The web site address is:

www.wrcc.sage.dri.edu.

2. Average wind velocity.

3. Predominant wind direction.

4. Average annual frost-free days.

If the above information is not available, please enter not available.

5. Impact of any microclimates on water management within the district.

Where appropriate, relate climate to water use. Are there special microclimates in the district

that require more (or less) water than other microclimates? The impact of climate may be similar to the impact of soil and terrain.

Where can soil classification information be obtained?

The NRCS (formally the Soil Conservation Service) has soil survey information for most agricultural regions in California. Recent surveys (within the last 25 years) contain a single

map called the "General Soil Map." These generalized soil maps group soils into what are

called soil associations and are appropriate for this Plan. These soil groupings are made according to soil characteristic similarities, such as texture, depth, salinity, slope, flooding

potential, impervious layers, etc. An awareness of these soil groupings can help target BMP

programs, such as in areas where distribution canals might have high seepage rates or in areas of tailwater quality problems. Reclamation's soil classification system is based on projected economic return from different classes of soils and is not useful in developing BMP programs.

Reclamation's soil classification system is not appropriate for this Plan.

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E. Natural and Cultural Resources

1. Provide the name of the natural resources area within the district.

Provide the name of the natural resource area, its size in acres, and a description.

Examples of

natural resources are wetlands, vernal pools, streams, wildlife refuges, and other areas.

2. Describe management of these resources in the past or present by the district.

If the contractor provides water to the natural resource areas or manages them, please describe

the contractor's role. Contractor staff probably already work with the U.S. Fish and Wildlife

Service, NRCS, U.S. Army Corps of Engineers, and the California Department of Fish and

Game to identify natural resource areas and threatened and endangered species in the district.

3. Provide the name of the recreational and/or cultural resources area.

Provide the name(s) of the recreational and/or cultural resource areas, size in acres, and descriptions. Examples of recreational resources are sites used for rafting, water skiing, and

fishing. Examples of cultural resources are archaeological and historical sites.

F. Operating Rules and Regulations

1. Attach a copy of the contractor's operating rules and regulations.

Note: If the contractor supplies no agricultural water, write "No Ag" in 2 through 5 below and

skip to Section G.

2. Describe the contractor's agricultural water allocation policy.

Describe the contractor's agricultural water allocation policy. Attach the relevant contractor

regulations as an appendix to the Plan or list the appropriate page number in this section.

3. Describe official and actual lead times necessary for water orders and shut-off.

Provide a description of the flexibility provided to farmers by attaching the relevant contractor

regulations as an appendix to the Plan or site the appropriate page number in this section.

Describe any differences between actual operations and the official rules, such as water delivery

orders being filled in 12 hours when the rules say 24 hours is the minimum. More

flexibility to

farmers generally leads to less wasted water.

4. Describe the contractor's policies regarding surface and subsurface drainage from farms.

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Attach the relevant contractor regulations as an appendix to the Plan or list the appropriate page number in this section.

5. Describe the contractor's policies on water transfers by the contractor and its customers.

Attach the relevant contractor regulations as an appendix to the Plan or list the appropriate page number in this section.

G. Water Measurement, Pricing, and Billing

Accurate water delivery measurement is an effective water management tool because both the

water user and the contractor are aware of quantity, timing, and location of water use.

Details on

measurement device level of accuracy, frequency of calibration and/or maintenance, and reading

schedule shows the contractor's commitment to effective water management.

Agricultural Customers

1. Provide total number of customers.

2. Provide total number of 100 percent measured customers.

3. Provide total number of customer turnouts.

4. Provide total number of measured turnouts.

5. Provide percentage of water delivered that was measured at customer turnouts.

6. Complete measurement device table.

A turnout is a water delivery point. Customers may have multiple water delivery points.

All

turnouts have some method of controlling water flow, but measured turnouts are those which can

accurately measure the quantity of water delivered.

Provide the number of each type of measurement device used by the contractor and maintenance

schedule.

The accuracy of the contractor's measurement devices was probably determined during installation, but periodic calibration is necessary to maintain accuracy. For the various devices,

provide the maintenance interval that the contractor has determined necessary. (See Appendix B

for Calibration and Maintenance of Measurement Devices.) If the contractor only performs

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maintenance when there is an indication of malfunction, write in “as needed.”

Urban Customers

- 1. Provide total number of customers.*
- 2. Provide total number of 100 percent measured customers.*
- 3. Provide total number of connections.*
- 4. Provide total number of measured connections.*
- 5. Provide percentage of potable water supplied in 2001 that was measured when delivered to a customer.*
- 6. Complete measurement device table.*

A connection is a water delivery point. Customers may have multiple connections. All connections have valves to control water flow, but measured connections also have meters.

Provide the number of each size and type of meter used by the contractor and maintenance schedule.

The accuracy of the contractor’s meters has been determined by the manufacturer, but periodic calibration is necessary to maintain accuracy. For the various devices, provide the maintenance interval that the contractor has determined necessary. If the contractor only performs maintenance when there is an indication of malfunction, write in “as needed.”

Agricultural and Urban Customers

- 1. Describe the contractor’s current year agriculture water charges.*

Describe the contractor's current year urban or agricultural water charges, including dollar

amounts for stand-by and quantity charges. Describe the rate structure for water deliveries that

are billed by quantity (e.g., declining, uniform, or increasing block).

Attach the contractor’s rate ordinance as an appendix to the Plan or list the appropriate page

number in this section.

- 2. Describe the contractor’s water-use data accounting procedures.*

Describe the contractor's water-use data accounting procedures, including how records are kept

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and archived, availability of water-use data to customers, and how many years of customer

water-use records are available. Attach copies of current year bills that were provided to

each customer type (i.e., agricultural, urban, etc.). Record management systems include ledgers, card files, standard computer software, and contractor-specific software. Describe the system and provide examples, if appropriate. The description of the accounting procedures should document how easily customers may access their water-use history and how many years of historic data are available to them. Attach an example of an actual bill for each customer category and discuss how easy the bills are to understand and how they provide customers with current water-use data, comparative yearly-use data, and pricing signals.

H. Water Shortage Allocation Policies

1. Attach the contractor's current year water shortage policies.

Include how reduced water supplies and hardship water would be allocated. If the contractor has different policies for multiple customer types (i.e., agricultural or urban), provide a copy of each policy.

All water-related operating rules and regulations should be attached to the Plan. Attach the relevant contractor regulations as an appendix to the Plan or list the appropriate page number in

this section. Reclamation requires that contractors with contracts that deliver more than 2,000

AF of water, have a water shortage contingency plan. For urban Plan development, assistance is

available from DWR at <http://www.owue.water.ca.gov/urbanplan> and from Reclamation at www.usbr.gov/mp/watershare/.

2. Attach the contractor's current year policies that address wasteful use of water.

Address wasteful use of water. Include information on enforcement methods. Attach the relevant contractor regulations as an appendix to the Plan or list the appropriate page number in this section.